5

10

15

20

25

30

## Patent Claims

- 1. UV-stabilised particles, characterised in that they reflect or absorb light having wavelengths of from 290 to 500 nm.
- 2. UV-stabilised particles according to Claim 1, characterised in that the particles are sheathed on the surface with an immobilisable polymer or polymer mixture, where the polymer layer comprises or includes one or more UV protection agents or UV stabilisers.
- 3. UV-stabilised particles according to Claim 1 or 2, characterised in that the UV protection agent or the UV stabiliser is selected from the group of UV absorbers, UV reflectors, UV scattering agents, antioxidants, dyes, carbon-black particles, free-radical scavengers, microtitanium and mixtures thereof.
- 4. UV-stabilised particles according to Claim 3, characterised in that the UV protection agent or the UV stabiliser is selected from the group of benzophenones, triazoles, triazines, titanium dioxide nanoparticles, iron oxide nanoparticles, carbon black, hindered amines (HALS) and mixtures thereof.
- 5. UV-stabilised particles according to one of Claims 1 to 4, characterised in that the particles comprise from 0.001 to 1000% by weight of UV protection agent or UV stabiliser, based on the particles.
- 6. UV-stabilised particles according to Claim 2, characterised in that the polymer is applied to the particle surface by precipitation in water and/or an organic solvent.
- 7. UV-stabilised particles according to one of Claims 1 to 6, characterised in that the particles are flake-form, spherical or needle-shaped.
- 8. UV-stabilised particles according to one of Claims 1 to 7, characterised in that the particles are selected from the group of BiOCl flakes, TiO<sub>2</sub> particles, fluorescent pigments, holographic pigments, pearles-

cent pigments, interference pigments, multilayered pigments, metaleffect pigments, goniochromatic pigments, conductive and magnetic pigments, organic pigments and azo pigments.

- 9. UV-stabilised particles according to Claim 8, characterised in that the pearlescent pigments, interference pigments, multilayered pigments and goniochromatic pigments are based on natural or synthetic mica, Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, SiO<sub>2</sub>, Fe<sub>2</sub>O<sub>3</sub>, glass or graphite flakes.
- 10. Process for the production of UV-stabilised particles according to Claim 1, characterised in that one or more UV protection agents or UV stabilisers are either applied directly to the particle surface to be protected and immobilised with a polymer or polymer mixture applied subsequently or applied to the surface and immobilised irreversibly in one step in the form of a mixture with the polymer or polymers.
  - 11. Process according to Claim 10, characterised in that the polymer is an LCST and/or UCST polymer or polymer mixture of LCST and/or UCST polymers.
  - 12. Use of the UV-stabilised pigments according to Claim 1 in surface coatings, water-borne coatings, powder coatings, paints, printing inks, security printing inks, plastics, concrete, in cosmetic formulations, in agricultural sheeting and tent awnings, for the laser marking of papers and plastics, as light protection, and for the preparation of pigment compositions and dry preparations.
  - 13. Formulations comprising the UV-stabilised pigments according to Claim 1.

20

25

30